

A3: SUMMARY OF THE PETITIONS FILED BY TPCL

Overview of the Thermal Stations

- 3.1 The petitioner has submitted that it operates the two Units (Units II and III) of Jojobera Power Plant that are the subject of tariff determination in the petitions filed by TPCL. In 1991, TSL obtained permission from the Government of Bihar to establish power plants in Jojobera through a subsidiary company named Jamshedpur Power Company Ltd. which was subsequently transferred to TPCL. TPCL thereafter commissioned two coal-based Units of 120 MW each, viz. Unit II and Unit III, at Jojobera for supply of power to TSL for its own use and for distribution in the township of Jamshedpur.
- 3.2 The following table summarizes the information pertaining to the two Units of the power plant operated by the petitioner.

Table 3 Summary of power plants owned by TPCL

S. No.	Name of thermal plant	Installed Capacity (MW)	Status of Operation	Commercial Operation Date
1	Unit II, Jojobera Power Plant	120	Operational	February 1, 2001
2	Unit III, Jojobera Power Plant	120	Operational	February 1, 2002

Status of PPA

- 3.3 The petitioner entered into a Power Purchase Agreement (PPA) with TSL on September 12, 1997. The petitioner has requested the Commission to accept the ARR and Tariff petition for generating stations Unit II and Unit III filed by the petitioner in accordance with the principles contained in the PPA.
- 3.4 The petitioner has submitted that the PPA between the petitioner and TSL was executed on September 12, 1997, i.e. before the Electricity Act 2003 that came into effect on June 10, 2003 and also before the constitution of JSERC in August 2002. The petitioner submitted that the PPA is legally binding on both parties and requested the Commission to consider the said PPA for the purpose of ARR and tariff determination.

ARR & Tariff Determination

- 3.5 The tariff for sale of electricity from a thermal power generating station comprises of two parts, namely, the recovery of annual capacity (fixed) charges and energy (variable) charges.
- 3.6 The annual capacity (fixed) charges consist of:
- (a) Return on equity
 - (b) Interest on loan capital

- (c) Operation & Maintenance (O&M) expenses
- (d) Depreciation
- (e) Interest on working capital

3.7 The energy (variable) charges cover fuel cost comprising:

- (a) The cost of primary fuel (coal), and
- (b) The cost of secondary fuel (oil)

Tariff petition for FY 2007-08

3.8 The table below summarizes the variable cost components as proposed by the petitioner in the petition of FY 2007-08 for the tariff period of FY 2007-08:

Table 4 Proposed Energy charges as per petition for FY 2007-08

Energy Charge Components	Units	Unit II	Unit III
Plant Load Factor	%	75	75
Heat Rate	kcal / kWh	2600	2600
Gross Generation	MUs	791	791
Auxiliary Consumption	%	10.57	10.55
Net Generation	MUs	707	707
Calorific Value of Coal	kcal / kg	3250 / 4775	3250 / 4775
Specific Oil Consumption	ml / kWh	2.0	2.0
Total Fuel Cost	Rs. Cr	71.56	71.56

3.9 The table below summarizes the fixed cost components as proposed by the petitioner in the petition of FY 2007-08 for the tariff period of FY 2007-08:

Table 5: Proposed Fixed Charges as per petition for FY 2007-08

Fixed Charge Components	Units	Unit II	Unit III
O&M expenses	Rs. Cr	19.51	18.21
Depreciation	Rs. Cr	35.88	29.25
Interest on Loan	Rs. Cr	14.70	12.20
Return on Equity	Rs. Cr	25.08	24.39
Interest on Working Capital	Rs. Cr	3.16	3.19
Total Fixed Charges	Rs. Cr	98.33	87.24

Tariff petition for FY 2008-09

3.10 The table below summarizes the variable cost components as proposed by the petitioner in the petition of FY 2008-09 for the tariff period of FY 2008-09:

Table 6 Proposed Energy Charges as per petition for FY 2008-09

Energy Charge Components	Units	Unit II	Unit III
Plant Load Factor	%	76	76
Heat Rate	kcal / kWh	2669	2662
Gross Generation	MUs	799	799
Auxiliary Consumption	%	10.40	10.40
Net Generation	MUs	716	716
Calorific Value of Coal	kcal / kg	2800 / 4400	2800 / 4400
Specific Oil Consumption	ml / kWh	0.97	0.91
Total Fuel Cost	Rs. Cr	88.22	87.79

3.11 The table below summarizes the fixed cost components as proposed by the petitioner in the petition of FY 2008-09 for the tariff period of FY 2008-09:

Table 7 Proposed Fixed Charges as per petition for FY 2008-09 (Rs. Crs)

Fixed Charge Components	Units	Unit I	Unit II
O&M expenses	Rs. Cr	21.02	19.04
Depreciation	Rs. Cr	32.55	32.55
Interest on Loan	Rs. Cr	7.44	11.93
Return on Equity	Rs. Cr	25.94	25.15
Interest on Working Capital	Rs. Cr	4.89	4.89
Income Tax (MAT)	Rs. Cr	3.28	3.18
Total Fixed Charges	Rs. Cr	95.12	96.74

Tariff petition for FY 2009-10

3.12 The table below summarizes the variable cost components as proposed by the petitioner in the petition of FY 2009-10 for the tariff period of FY 2009-10:

Table 8 Proposed Energy Charges as per petition for FY 2009-10

Energy Charge Components	Units	FY 2007-08 for true-up		FY 2008-09 (RE)		FY 2009-10(Proj.)	
		Unit II	Unit III	Unit II	Unit III	Unit II	Unit III
Plant Load Factor	%	78	74	76	76	80	80
Heat Rate	kcal / kWh	2645	2676	2669	2662	2680	2680
Gross Generation	MUs	822	780	799	799	841	841
Auxiliary Consumption	%	10.40	10.39	10.40	10.40	10.40	10.40
Net Generation	MUs	736	699	716	716	754	754
Calorific Value of Coal	kcal / kg	2809 / 4347	2809 / 4347	2800 / 4400	2800 / 4400	2800 / 4400 / 3000 / 5200	2800 / 4400 / 3000 / 5200
Specific Oil Consumption	ml / kWh	0.85	0.93	0.97	0.91	0.97	0.97

3.13 The table below summarizes the fixed cost components as proposed by the petitioner in the petition of FY 2009-10 for the tariff period of FY 2009-10:

Table 9 Proposed Fixed Charges as per petition for FY 2009-10

Fixed Charge Components	Units	FY 2007-08 for true-up		FY 2008-09 (RE)		FY 2009-10(Proj.)	
		Unit II	Unit III	Unit II	Unit III	Unit	Unit
O&M expenses	Rs. Cr	19.65	17.80	21.02	19.04	22.49	20.38
Depreciation	Rs. Cr	32.91	32.55	32.55	32.55	32.54	32.19
Interest on Loan	Rs. Cr	10.77	14.81	6.75	10.82	2.82	6.85
Return on Equity	Rs. Cr	27.73	23.56	25.94	25.15	29.57	28.67
Interest on Working Capital	Rs. Cr	4.76	4.59	4.89	4.89	5.68	5.67
Income Tax (MAT)	Rs. Cr	3.54	3.01	3.32	3.21	3.78	3.66
Total Fixed Charges	Rs. Cr	99.36	96.32	94.47	95.66	96.88	97.42